

Work Order ID 95852

January-21-13 8:54:37 AM

\*95852\*

Page 1

Item ID: D2151

Accept

\*N900040100\*

Setup

Start

\*NS1\*

Revision ID:

Item Name: Packer Doubler, Hinge

Stop

\*NS2\*

Start Date: 1/16/13 Start Qty: 30.00

\*30\*

Cust Item ID:

Required Date: 1/30/13 Req'd Qty: 30.00

\*30\*

Customer:

Reference:

Approvals:

Process Plan:

*el*

Date: *1-16-13*

Tooling:

Date:

Run

Start

\*NR1\*

QC:

Date:

SPC (Y/N):

Date:

Stop

\*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr								
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D2151	Rev B								
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100		0.00							
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**\*100\*** FLOW WATER JET *30 1 Jn13-3-27*

Waterjet

Memo

0.00

FLOW CNC Waterjet

1-Cut as per Dwg D2151

Dwg Rev: *B* Prog Rev: *B* 2-

Deburr if necessary

*2024.040*

PTO  $\longrightarrow$

110	QC2- Inspect parts off machine FAI/FAIB	0.00							
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**\*110\***

QC

Quality Control

Memo

0.00

*30 1 Jn13-3-27*

120	QC8- Inspect parts - second check	0.00	<i>DAS 27</i>						
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**\*120\***

QC

Quality Control

Memo

0.00

*13.4.1*

*30*

NCR:  Yes /  No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: JK Date: 13/04/08QA Closed: JK Date: 13/4/08

Work Order: <u>95852</u>	DISPOSITION	AGAINST DEPARTMENT/PROCESS					
Part No. <u>D2151</u>	Rework <input type="checkbox"/> Scrap <input checked="" type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input checked="" type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>		
NCR No. <u>13.2454</u>	JK Programming						

Root Cause	Date	Step	Qty	Description of work order update or Non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Doc/Data	✓ 13-3-27		100	1x Holes not found.		Scrap & destroy.	JM 13-3-27	JK 21	
Equip/Tooling				Program had old hole path.		Qty x 1			JKAS 16-3-27
Operator						No re-cut.		JK 1341	
Material						Extra was cut.			JK 04/04
Setup									
Other									
Process									
Supplier									
Training									
Unapproved									

## FAULT CATEGORY

Landing Gear	General			
Bending	Bend	Grain	Ovalized	Pressure/Forced
Centre Not Concentric to O/S	BOM/Route	Hardware	Over/Under tolerance	Temperature/Cure
Cracks	Broken/Damaged	Inspection Incomplete	Part Incorrect	Weld
Crushed/Crimped.	Burrs	Instructions Incomplete/Unclear	Part Lost/Missing	Wrong Stock Pulled
Cuffs	Contamination	Maintenance	Part Moved	
Heat Treat	Countersink	Mislabeled	Positioned Wrong	
Inspection Strip in Tube	Cut Too Short	Misread	Power Loss/Surge	
Ripples in Bend	Drill Holes	Offset		
Torque Waves in Extrusion	Drawing	Out of Calibration		
Turning Sequence	Finish	Out of Sequence		
Wave/Twist in Tube	Folio	Outside Dimensions		

Re-program, Repath Cut.

**Work Order ID 95852**

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**\*95852\***

Page 2

Item ID: D2151

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Item Name: Packer Doubler, Hinge

Stop

**\*NS2\***

Start Date: 1/16/13 Start Qty: 30.00

**\*30\***

Cust Item ID:

Required Date: 1/30/13 Req'd Qty: 30.00

**\*30\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
Description

130

**\*130\***

Small Fab

Small Fab

140

**\*140\***

HandFinish

Hand Finishing

150

**\*150\***

Powdercoat

Powder Coating

Set Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

0.00

0.00

N/A  
SPB

0.00

0.00

30 16/3/12

0.00

Memo

9:40 0.00

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

320°F 10:10

30x Ø 13/04/03

W124245

NCR: Yes / No

DQA: Date:

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Work Order Update <input type="checkbox"/>	Skid-tube <input type="checkbox"/> Machining <input type="checkbox"/> Thermoforming <input type="checkbox"/> Large Fab <input type="checkbox"/>	Crosstube <input type="checkbox"/> Small Fab <input type="checkbox"/> Finishing <input type="checkbox"/> Composite <input type="checkbox"/>	Water Jet <input type="checkbox"/> Prod. Eng. Coor. <input type="checkbox"/> Rec/Store/Packaging <input type="checkbox"/> Supplier <input type="checkbox"/>	Engineering <input type="checkbox"/> Quality <input type="checkbox"/> Other <input type="checkbox"/>				
Part No. _____											
NCR No. _____											
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data <input type="checkbox"/> Equip/Tooling <input type="checkbox"/> Operator <input type="checkbox"/> Material <input type="checkbox"/> Setup <input type="checkbox"/> Other <input type="checkbox"/> Process <input type="checkbox"/> Supplier <input type="checkbox"/> Training <input type="checkbox"/> Unapproved <input type="checkbox"/>											
FAULT CATEGORY											
Landing Gear				General							
Bending <input type="checkbox"/> Centre Not Concentric to O/S <input type="checkbox"/> Cracks <input type="checkbox"/> Crushed/Crimped. <input type="checkbox"/> Cuffs <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Ripples in Bend <input type="checkbox"/> Torque Waves in Extrusion <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube <input type="checkbox"/>	Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damaged <input type="checkbox"/> Burr <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drill Holes <input type="checkbox"/> Drawing <input type="checkbox"/> Finish <input type="checkbox"/> Folio <input type="checkbox"/>	Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Maintenance <input type="checkbox"/> Mislabelled <input type="checkbox"/> Misread <input type="checkbox"/> Offset <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence <input type="checkbox"/> Outside Dimensions <input type="checkbox"/>	Ovalized <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge <input type="checkbox"/>	Pressure/Forced <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other <input type="checkbox"/>							

**Work Order ID 95852**

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Page 3

Item ID: D2151

Accept

**\*N900040100\***

Setup

Start

**\*NS1\***

Revision ID:

Item Name: Packer Doubler, Hinge

Stop

**\*NS2\***

Start Date: 1/16/13

Start Qty: 30.00

**\*30\***

Cust Item ID:

Required Date: 1/30/13

Req'd Qty: 30.00

**\*30\***

Customer:

Reference:

Approvals:

Process Plan:

Date:

Tooling:

Date:

Run

Start

**\*NR1\***

QC:

Date:

SPC (Y/N):

Date:

Stop

**\*NR2\***Sequence ID/  
Work Center IDOperation  
DescriptionSet Up/  
Run Hours

Tool ID

Tool #

Plan  
CodeAccept  
QtyReject  
QtyReject  
NumberInsp.  
Stamp

160

**\*160\***

QC

Quality Control

QC3- Inspect Part Finish

0.00

30 *d* *13/04/03*

170

**\*170\***

Packaging

Packaging

Identify as per dwg &amp; Stock Location:

0.00

Memo

*ST205*

0.00

*PJ/AB/B8*

180

**\*180\***

QC

Quality Control

QC21- Final Inspection - Work Order Release

0.00

Memo

0.00

*13/4/14**013-04-4*

NCR: Yes / No

DQA: \_\_\_\_\_ Date: \_\_\_\_\_

## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS					
			Rework <input type="checkbox"/>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>				
			Scrap <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coor. <input type="checkbox"/>	Quality <input type="checkbox"/>				
			Use-as-is <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>				
			Work Order Update <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>					
Root Cause	Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data											
Equip/Tooling											
Operator											
Material											
Setup											
Other											
Process											
Supplier											
Training											
Unapproved											
FAULT CATEGORY											
Landing Gear				General							
				<input type="checkbox"/> Bending	<input type="checkbox"/> Bend	<input type="checkbox"/> Grain	<input type="checkbox"/> Ovalized	<input type="checkbox"/> Pressure/Forced			
				<input type="checkbox"/> Centre Not Concentric to O/S	<input type="checkbox"/> BOM/Route	<input type="checkbox"/> Hardware	<input type="checkbox"/> Over/Under tolerance	<input type="checkbox"/> Temperature/Cure			
				<input type="checkbox"/> Cracks	<input type="checkbox"/> Broken/Damaged	<input type="checkbox"/> Inspection Incomplete	<input type="checkbox"/> Part Incorrect	<input type="checkbox"/> Weld			
				<input type="checkbox"/> Crushed/Crimped.	<input type="checkbox"/> Burrs	<input type="checkbox"/> Instructions Incomplete/Unclear	<input type="checkbox"/> Part Lost/Missing	<input type="checkbox"/> Wrong Stock Pulled			
				<input type="checkbox"/> Cuffs	<input type="checkbox"/> Contamination	<input type="checkbox"/> Maintenance	<input type="checkbox"/> Part Moved				
				<input type="checkbox"/> Heat Treat	<input type="checkbox"/> Countersink.	<input type="checkbox"/> Mislabeled	<input type="checkbox"/> Positioned Wrong				
				<input type="checkbox"/> Inspection Strip in Tube	<input type="checkbox"/> Cut Too Short	<input type="checkbox"/> Misread	<input type="checkbox"/> Power Loss/Surge				
				<input type="checkbox"/> Ripples in Bend	<input type="checkbox"/> Drill Holes	<input type="checkbox"/> Offset					
				<input type="checkbox"/> Torque Waves in Extrusion	<input type="checkbox"/> Drawing	<input type="checkbox"/> Out of Calibration					
				<input type="checkbox"/> Turning Sequence	<input type="checkbox"/> Finish	<input type="checkbox"/> Out of Sequence					
				<input type="checkbox"/> Wave/Twist in Tube	<input type="checkbox"/> Folio	<input type="checkbox"/> Outside Dimensions					

# Picklist Print

January 21-13 8:54:36 AM

Page 1

Work Order ID: 95852

Parent Item: D2151

Parent Item Name: Packer Doubler, Hinge

Start Date: 1/16/13

Required Date: 1/30/13

Comments: IPP C00.10.23 Re-format (mpp 2101)EC

IPP Rev:D 06-04-28 Manufactured on Water Jet JLM

IPP Rev:E 06-11-24 As per Rev B JLM

Start Qty: 30.00

Required Qty: 30.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M2024T3S.040 2024-T3 .040 sheet		Purchased	No			110	sf	247.2023	0.035	1105263 1.5		Jm13.3.27	

Location	Loc Qty	Loc Code
MAT022	247.2023252	
120605	65.8254832	
121197	64.996842	
122136	31.78	
123217	84.6	

124987

124987

NCR: Yes / No

## WORK ORDER NON-CONFORMANCE / UPDATE

DQA: Date:

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order: _____			DISPOSITION			AGAINST DEPARTMENT/PROCESS						
			Rework	Skid-tube	Crosstube	Water Jet	Engineering					
			Scrap	Machining	Small Fab	Prod. Eng. Coor.	Quality					
			Use-as-is	Thermoforming	Finishing	Rec/Store/Packaging	Other					
			Work Order Update	Large Fab	Composite	Supplier						
Root Cause		Date	Step	Qty	Description of work order update or Non-conformance		Initial Chief Eng	Action Description		Sign & Date	Verification	QC Inspector
Doc/Data												
Equip/Tooling												
Operator												
Material												
Setup												
Other												
Process												
Supplier												
Training												
Unapproved												
FAULT CATEGORY												
Landing Gear				General								
Bending		Bend		Grain		Ovalized		Pressure/Forced				
Centre Not Concentric to O/S		BOM/Route		Hardware		Over/Under tolerance		Temperature/Cure				
Cracks		Broken/Damaged		Inspection Incomplete		Part Incorrect		Weld				
Crushed/Crimped		Burrs		Instructions Incomplete/Unclear		Part Lost/Missing		Wrong Stock Pulled				
Cuffs		Contamination		Maintenance		Part Moved						
Heat Treat		Countersink		Mislabeled		Positioned Wrong						
Inspection Strip in Tube		Cut Too Short		Misread		Power Loss/Surge						
Ripples in Bend		Drill Holes		Offset								
Torque Waves in Extrusion		Drawing		Out of Calibration								
Turning Sequence		Finish		Out of Sequence								
Wave/Twist in Tube		Folio		Outside Dimensions								

DART AEROSPACE LTD	Work Order:	958521
Description: Packer	Part Number:	D2151
Inspection Dwg: D2151	Rev: B	Page 1 of 1

# FIRST ARTICLE INSPECTION CHECKLIST

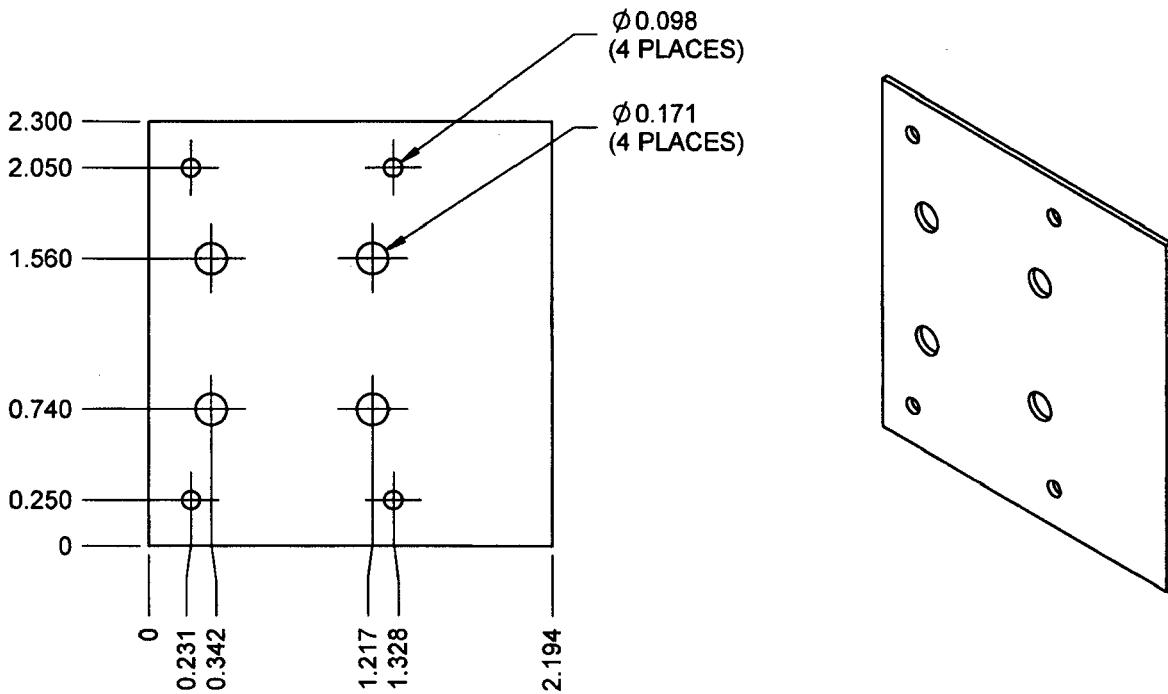
## X First Article      Prototype

Measured by:	Jm	Audited by:	27 AS	Prototype Approval:	N/A
Date:	13.3.27	Date:	13.9.1	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	04.08.12	New Issue	KJ/JLM	
B	06.11.24	Dwg Revision revised	KJ/JLM	

**DART**

DESIGN <b>BW</b>	DRAWN BY <b>CB</b>	<b>DART AEROSPACE LTD</b> HAWKESBURY, ONTARIO, CANADA
CHECKED <i>CE</i>	APPROVED <i>MM</i>	DRAWING NO. <b>D2151</b>
DATE <b>06.10.13</b>		REV. B SHEET 1 OF 1
REV <b>A</b>	DATE <b>95.05.01</b>	TITLE <b>PACKER</b>
REV <b>B</b>	DATE <b>06.10.13</b>	SCALE <b>1:1</b>
REV	DATE	DESCRIPTION
A	95.05.01	NEW ISSUE
B	06.10.13	UPDATE DRAWING

**RELEASED***06.11.20 MM**95852***D2151 PACKER****NOTES:**

- 1) MATERIAL: ALUMINUM 2024-T3 SHEET 0.040 THICK PER QQ-A-250/4 OR AMS 4037 (REF DART SPEC M2024T3S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1  
POWDER COAT WHITE GLOSS (4.3.5.1) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) IDENTIFY WITH DART P/N "D2151" USING FINE POINT PERMANENT INK MARKER

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